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Supplementary Information

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Results for cesium carbonate interlayers

Figure S1 depicts the luminous efficacy as a function of voltage for poly[2-methoxy-5-(2'-ethylhexyloxy)-*p*-phenylenevinylene] (MEH-PPV) OLEDs comprising a barium and cesium carbonate cathode interlayer, respectively. Cesium carbonate was deposited from a 2-ethoxyethanol solution. The best Cs_2CO_3-based devices yielded an efficiency of approximately a factor of 2 lower than the corresponding barium-based control devices. It should be noted that the absolute efficacy values cannot be directly compared to the ones in the manuscript as a result of a different measurement setup.

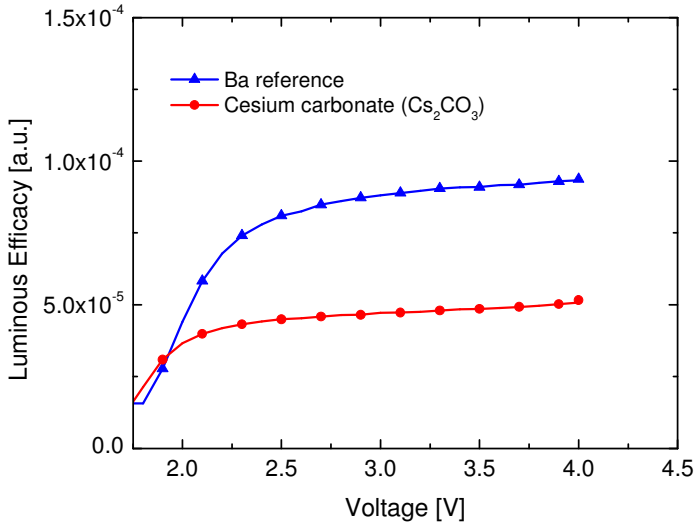

Fig. S1. Luminous efficacy vs voltage characteristics of MEH-PPV OLEDs with Ba and Cs_2CO_3 electron-injection layers.

Various attempts were made to use a Cs_2CO_3 injection layer in blue-emitting PSF-TAD devices. Although a wide range of Cs_2CO_3 concentrations (0.25-36 mg/mL in 2-ethoxyethanol) was

tested, as well as different solvents, the Cs_2CO_3 interlayer could not significantly improve electron injection from the aluminum cathode. As a result, efficiencies of the PSF-TAD OLEDs were orders of magnitude lower than the barium reference devices.